

California High-Speed Rail Authority



RFP No.: HSR 14-32

**Request for Proposals for Design-Build
Services for Construction Package 4**

**Reference Material, Part A.2
Standard Drawings**

DRAINAGE		
DRAWING TYPE	DRAWING NO.	DRAWING TITLE
SD	SD-CD-900	TRACK DRAIN/UNDERDRAIN, CLEANOUT AND RISER DETAILS
SD	SD-CD-901	DITCH DETAILS
SD	SD-CD-902	STORM DRAIN HOLES
SD	SD-CD-903	RETAINING WALL DRAINAGE DETAILS

REV	DATE	BY	CHK	APP	DESCRIPTION	DESIGNED BY R. MINCIO DRAWN BY V. HUANTE CHECKED BY H. NGUYEN IN CHARGE J. CHIRCO DATE 01/24/2014	CONTRACT NO. INDEX-2 CP2-3 SCALE NO SCALE SHEET NO.

**PARSONS
BRINCKERHOFF**

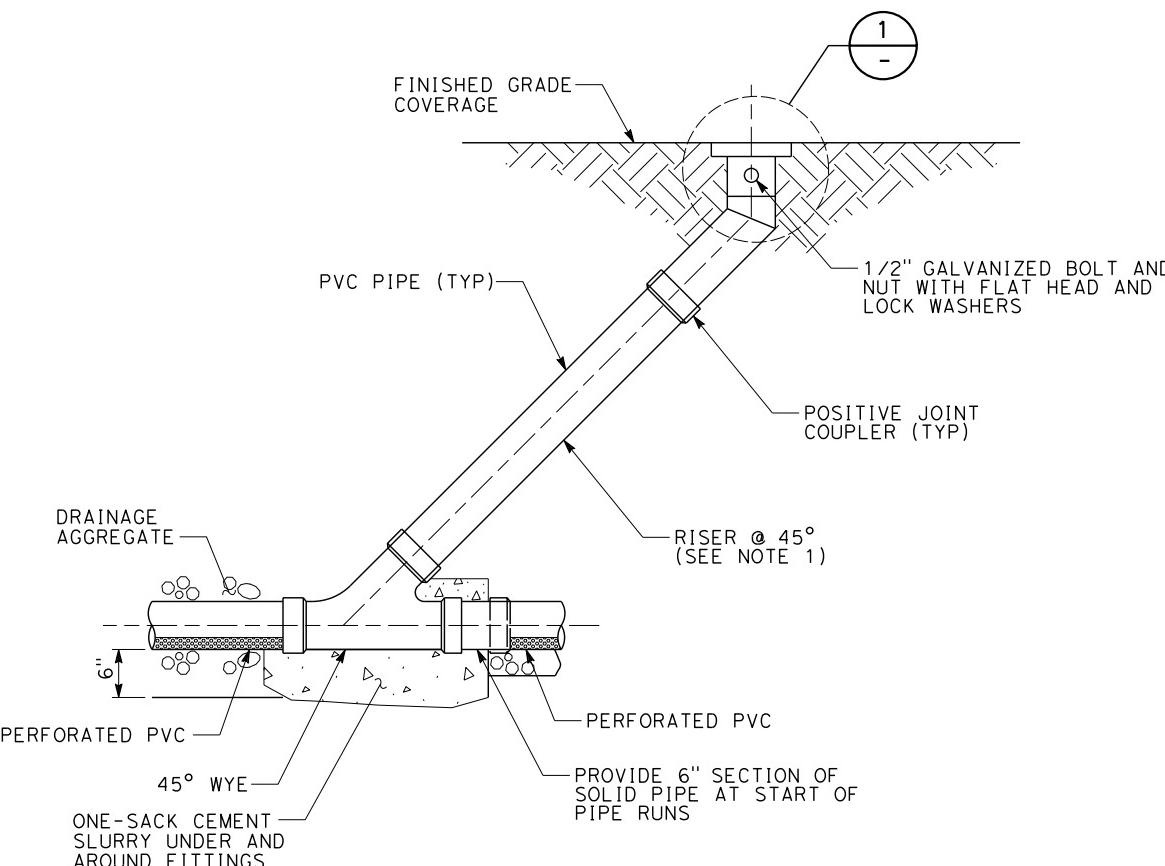


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SIERRA SUBDIVISION**
STANDARD DRAWINGS
CONTRACT PACKAGE 2-3
SHEET INDEX

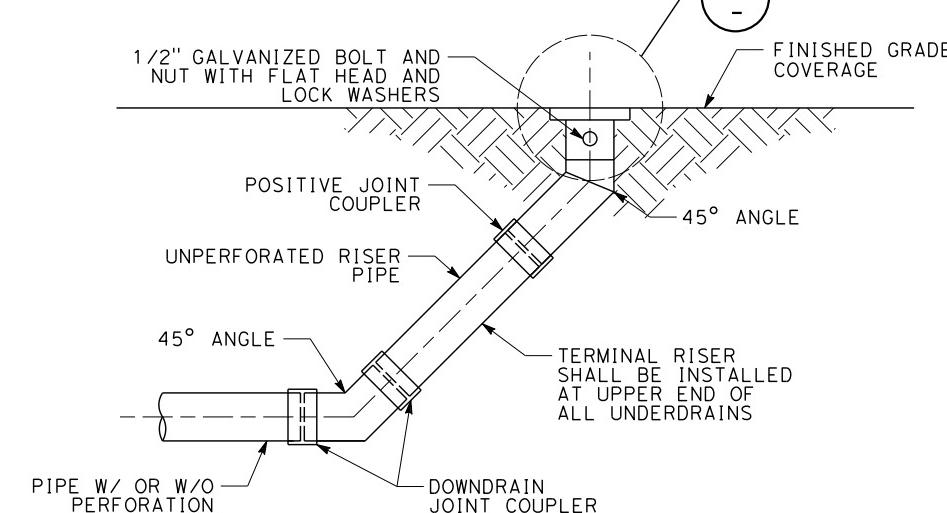
CONTRACT NO. INDEX-2 CP2-3 SCALE NO SCALE SHEET NO.

NOTES:

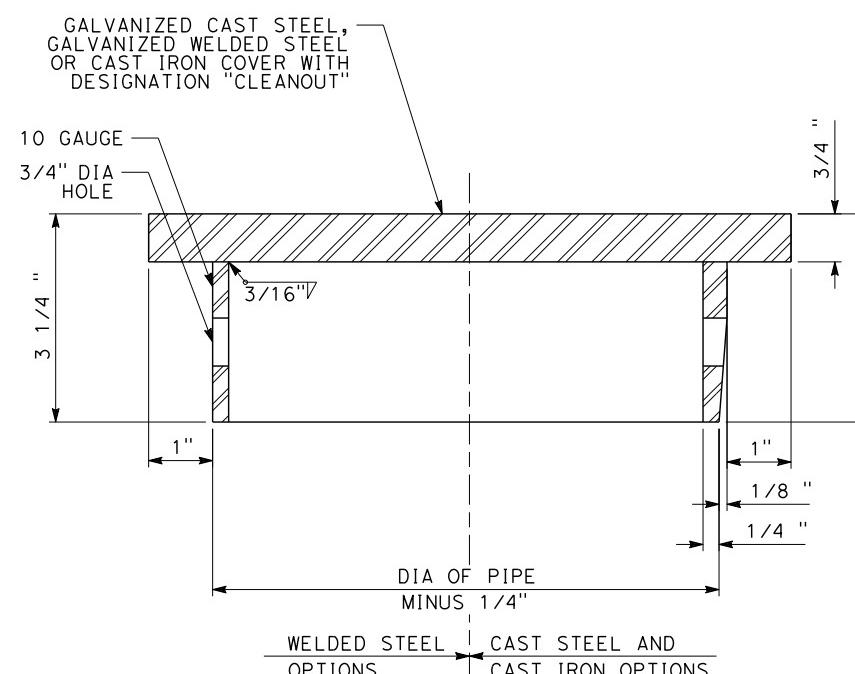
1. RISER MAY BE ANGLED AT 90 DEGREES DUE TO SPACE CONSIDERATIONS.



INTERMEDIATE RISER/CLEANOUT
SCALE: 1"=1'-0"



TERMINAL RISER DETAIL
SCALE: 1"=1'-0"



DETAIL
SCALE: 8"=1'-0"

REV	DATE	BY	CHK	APP	DESCRIPTION	DESIGNED BY K. SISTLA	DRAWN BY V. HUANTE	CHECKED BY A. ABTAHI	IN CHARGE J. CHIRCO	DATE 01/24/2014

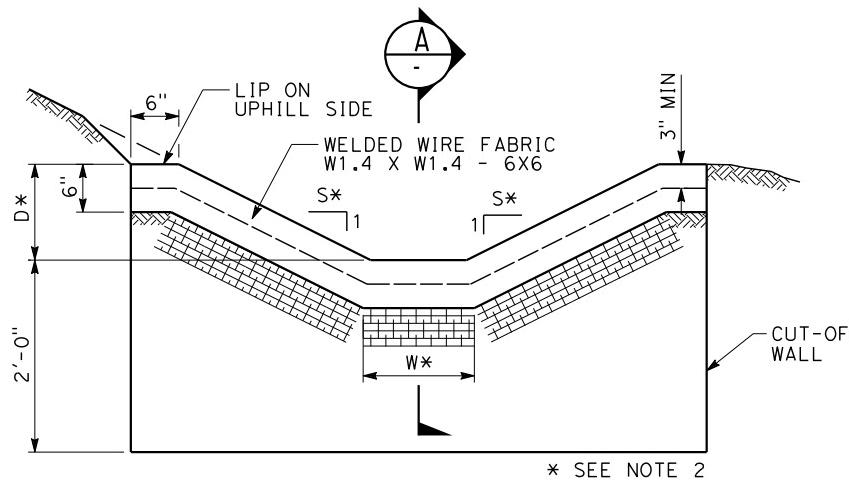
**PARSONS
BRINCKERHOFF**



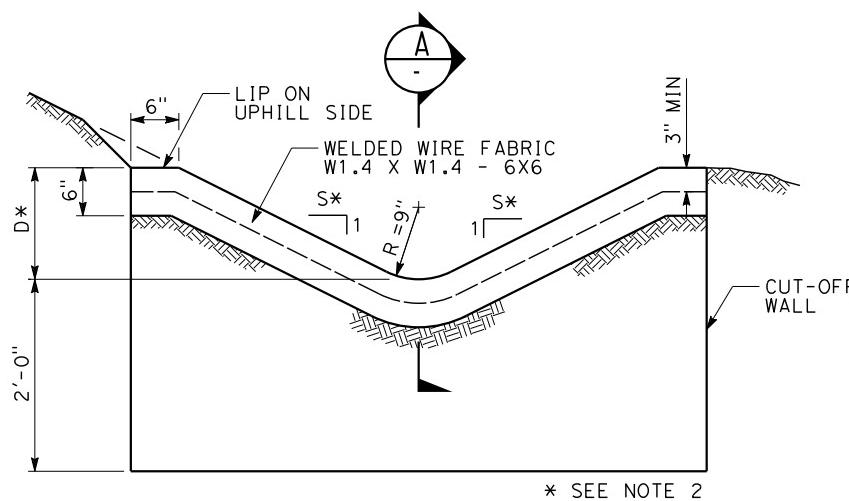
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
DRAINAGE STANDARD**

TRACK DRAIN/UNDERDRAIN
CLEANOUT AND RISER DETAILS

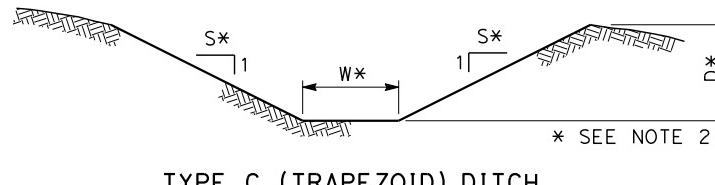
CONTRACT NO.	
DRAWING NO.	SD-CD-900
SCALE	AS SHOWN
SHEET NO.	



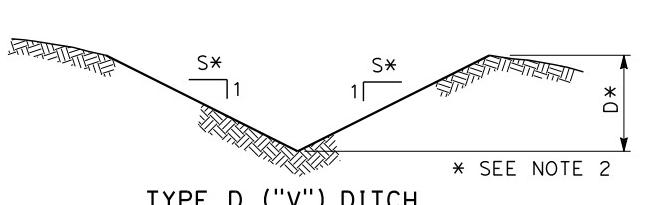
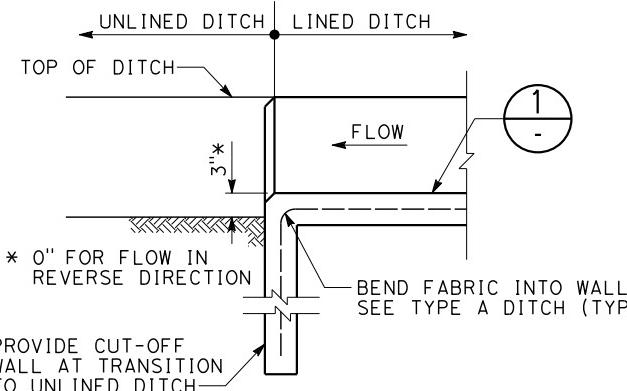
TYPE A (TRAPEZOID) DITCH



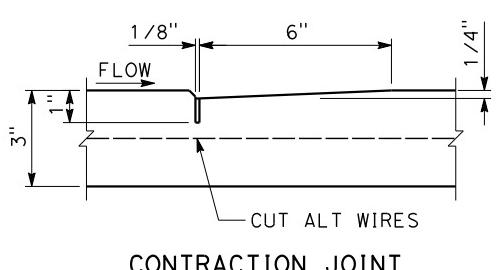
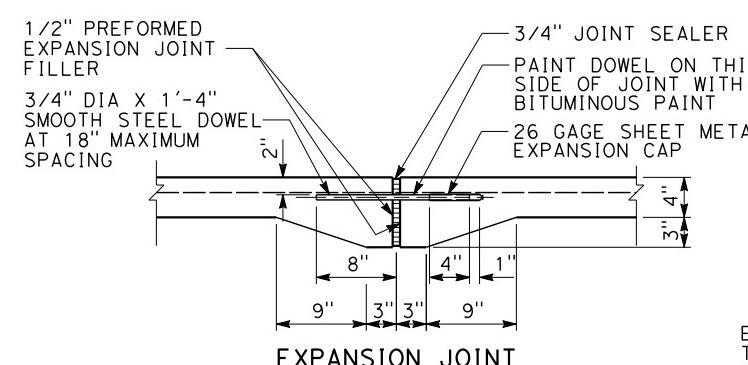
TYPE B ("V") DITCH



TYPE C (TRAPEZOID) DITCH

DITCH DETAILS
NO SCALE

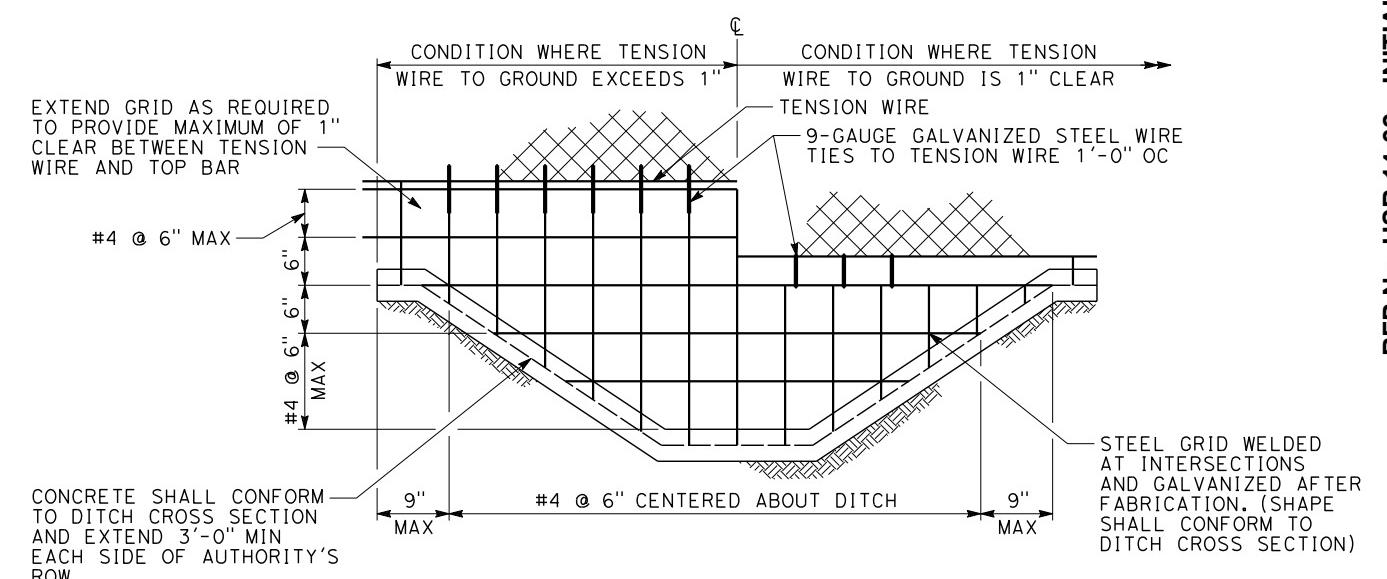
SECTION A



JOINT DETAILS

NO SCALE
(SEE NOTE 3)**PARSONS
BRINCKERHOFF**

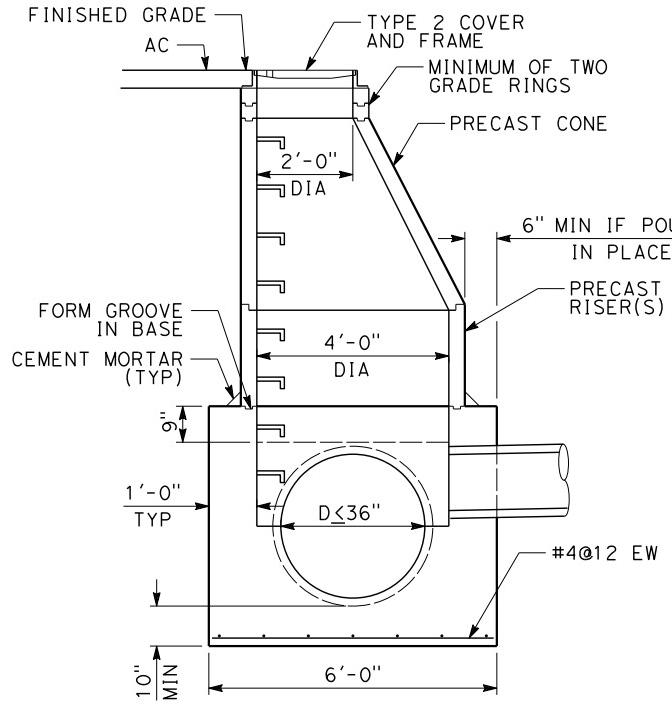
- NOTES:**
1. DITCH LINING SHALL BE CONCRETE OR SHOTCRETE.
 2. DITCH SHALL CONFORM TO THE FOLLOWING MINIMUM DIMENSIONS:
D = DEPTH OF DITCH, 1 FOOT MINIMUM
S = SLOPE OF DITCH, SIDES, 2:1 MAX FOR CONCRETE LINED CHANNEL, 3:1 MAX FOR GRASS LINED CHANNEL
W = WIDTH OF BOTTOM OF DITCH, 4 FEET MINIMUM
 3. TYPE A AND B DITCHES SHALL HAVE A CONTRACTION JOINT EVERY 10 FEET, AND AN EXPANSION JOINT EVERY 100 FEET.
 4. OPEN CHANNEL CLOSURE SHALL BE REQUIRED AT EACH LOCATION WHERE AN OPEN CHANNEL PASSES UNDER AUTHORITY'S RIGHT-OF-WAY.

OPEN CHANNEL CLOSURE DETAIL
NO SCALE
(SEE NOTE 4)

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**CALIFORNIA HIGH-SPEED TRAIN PROJECT
DRAINAGE STANDARD****DITCH DETAILS**

CONTRACT NO.
DRAWING NO. SD-CD-901
SCALE NO SCALE
SHEET NO.

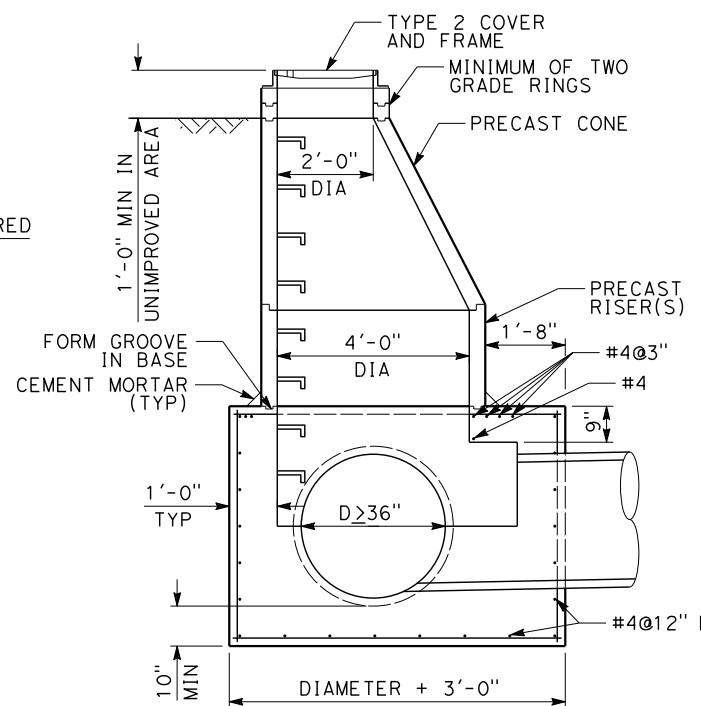


SECTION

NO SCALE

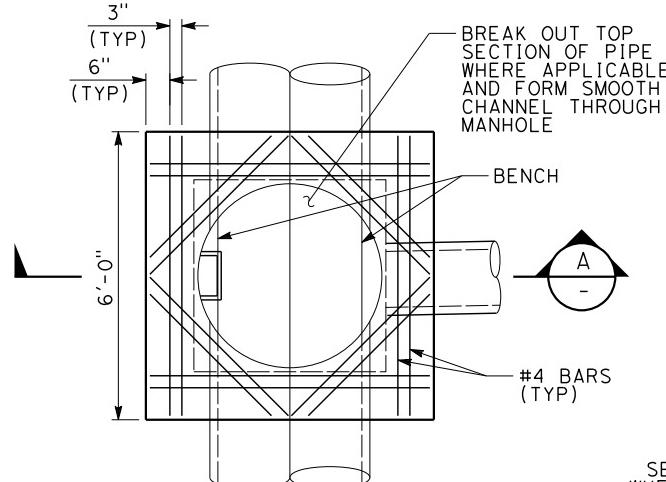
NOTE:
FOR STEP DETAILS, SEE NOTES

**MANHOLE FOR
PIPE DIAMETER 36" OR LESS**

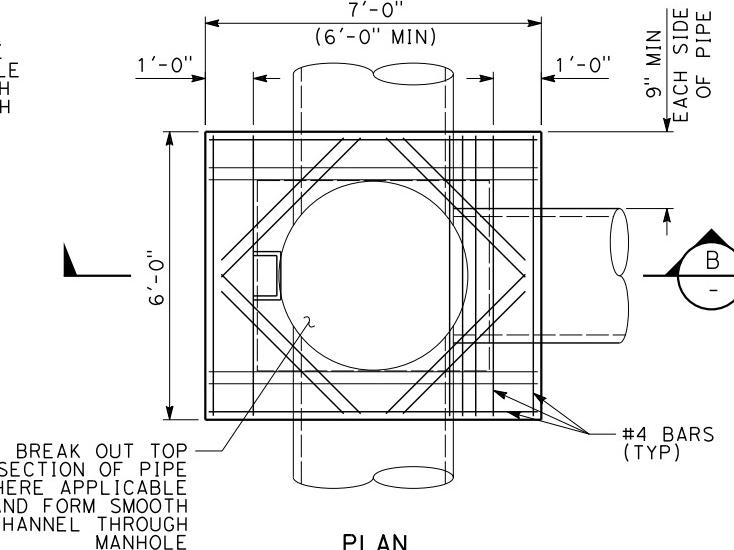


SECTION
NO SCALE

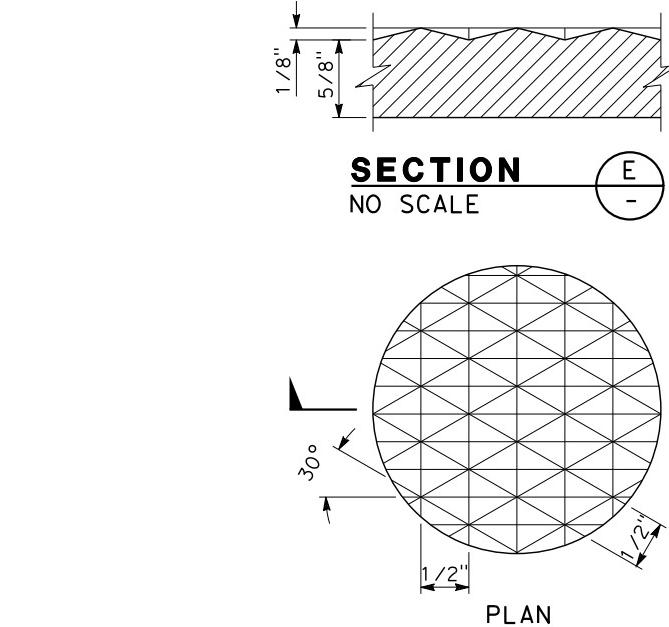
**MANHOLE FOR
PIPE DIAMETER MORE THAN 36"**



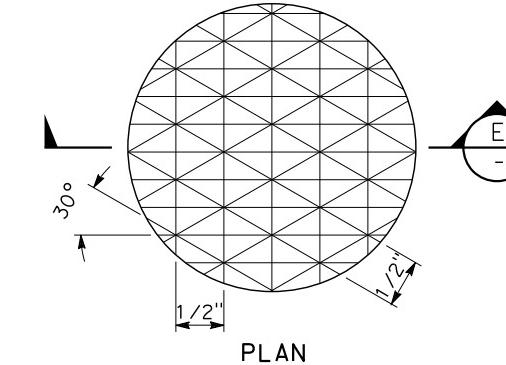
PLAN



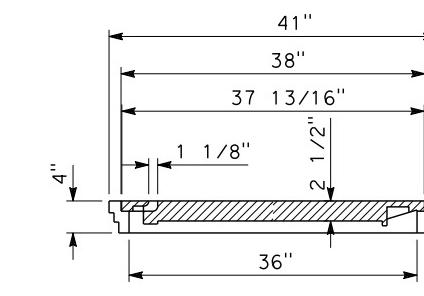
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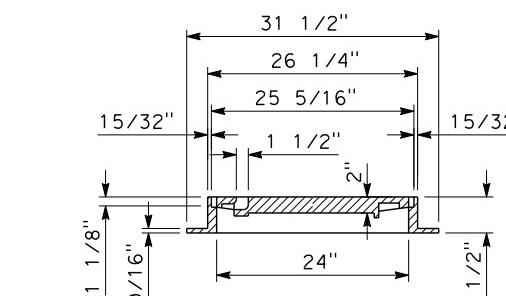
SECTION
NO SCALE



DETAIL
NO SCALE

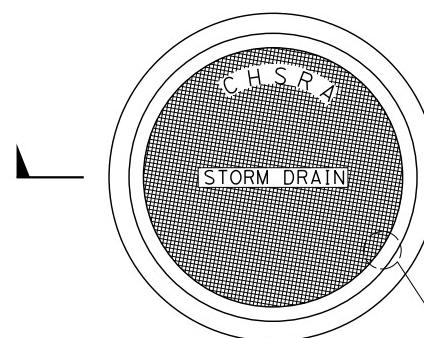


SECTION

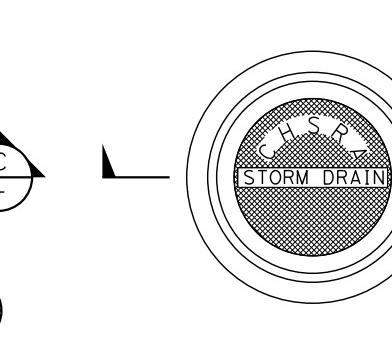


SECTION

NO SCALE



PLA



TYPE 1 COVER AND FRAME
(WEIGHT=700#)

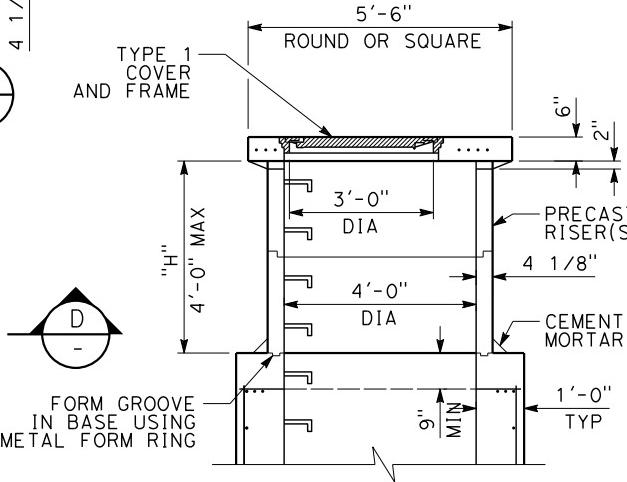


TYPE 2 COVER AND FRAME
(WEIGHT=320#)

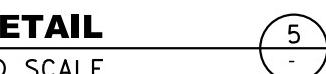


ALTERNATE CHIMNEY AND GRADE SLAB

(REQUIRED WHERE "H" IS LESS THAN 4'-0")

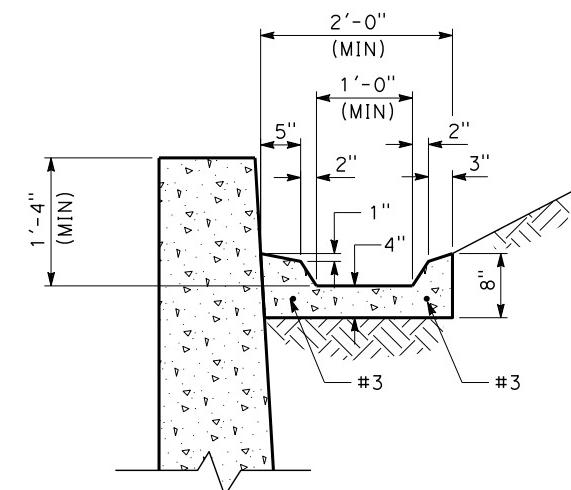
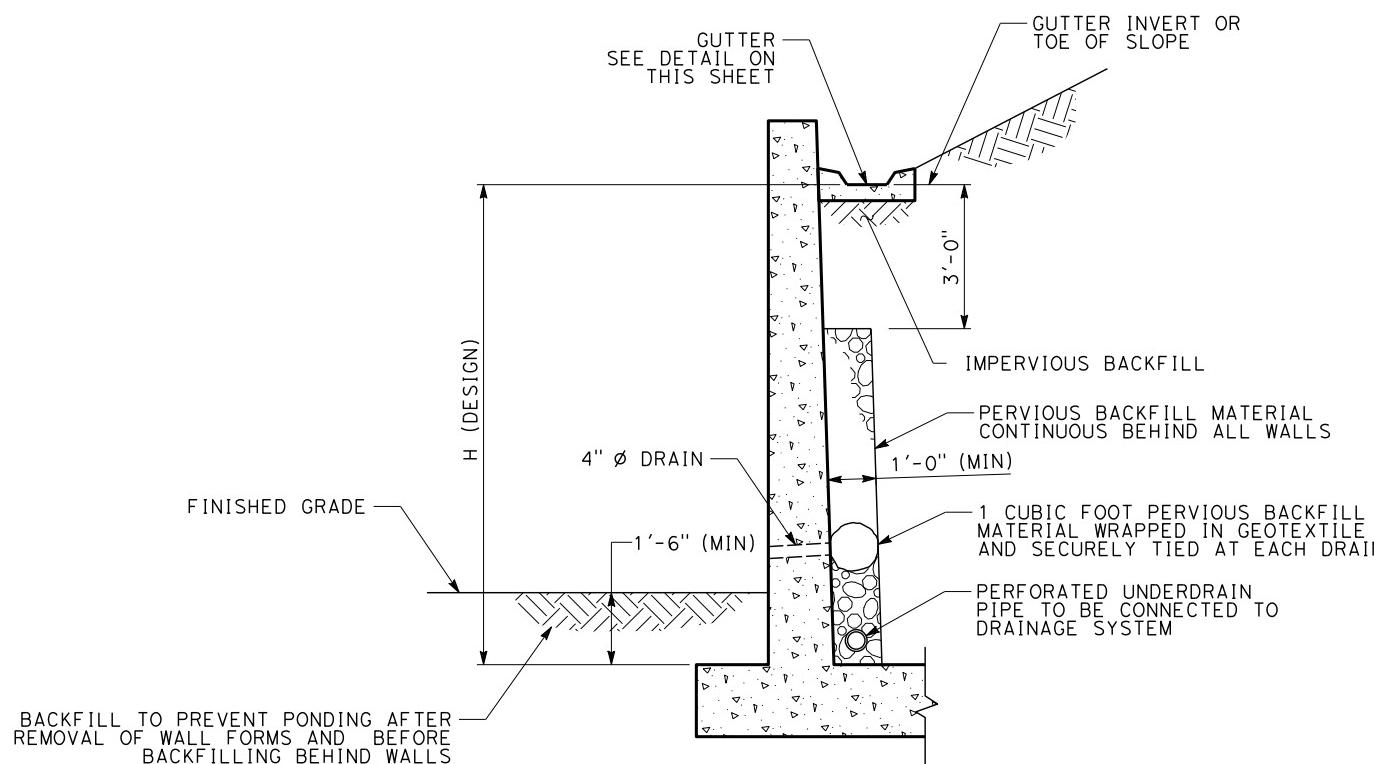


ALTERNATE CHIMNEY AND GRADE SLAB



NOTES:

1. RETAINING WALL STRUCTURE IS SCHEMATIC AND DOES NOT REPRESENT DESIGN.



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**PARSONS
BRINCKERHOFF**

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
DRAINAGE STANDARD**

RETAINING WALL DRAINAGE DETAILS

CONTRACT NO.
DRAWING NO. SD-CD-903
SCALE NO SCALE
SHEET NO.